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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/644,739      | 08/21/2003  | Bernd Gigas          | 87335.3820          | 6205             |

7590 02/24/2006

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| EXAMINER |
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DRODGE, JOSEPH W

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| ART UNIT | PAPER NUMBER |
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1723

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                              |  |
|------------------------------|-------------------------------|------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/644,739 | Applicant(s)<br>GIGAS ET AL. |  |
|                              | Examiner<br>Joseph W. Drodge  | Art Unit<br>1723             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-4,6-19 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4,6-19 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1723

The drawings were received on 17 January 2006. These drawings are generally acceptable with the exception of the following requirement to correct a new objection to claim 1 which follows.

A replacement for figure 1 is required because the figure requires labeling that it is "Prior Art", since only that which is known or "conventional" is illustrated (Specification at page 6, paragraph 15).

The indicated allowability of claims 7 and 25 are withdrawn in view of the newly discovered reference(s) to Lynch patent 4,333,835; Johnson patent 6,019,898; Casner et al patent 2,817,440 and Stonner et al patent 3,820,954. Any inconvenience to applicants is regretted. Rejections based on the newly cited reference(s) follow.

Claims 2-4,6-19 and 22-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, line 7 "said second partition" lacks antecedent basis; this clause should apparently follow the clause reciting details of 2<sup>nd</sup> weir with second partition.

In claim 25, line 9 "said labyrinth means" similarly lacks antecedent basis and should follow the clause reciting 2<sup>nd</sup> weir details.

Antecedent basis is also lacking for at least the following terminology in dependent claims: claim 9 "the bottom of said first weir", claims 9 and 18 "said organic weir".

Art Unit: 1723

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Lynch patent 4,333,835. Lynch discloses the following: settler compartment 12 having top section adjacent top wall 14/16/20 and bottom section 52/56/58 adjacent a bottom wall, coalescing compartment means 32,68,70,125,160 , 1<sup>st</sup> weir means 130,131,170 (column 8, lines 23-30 and column 9, lines 65-69) and inlet openings 62 therefor, 2<sup>nd</sup> weir means having upwardly extending 1<sup>st</sup> and 2<sup>nd</sup> partitions 60 and 44 and downwardly extending 3<sup>rd</sup> partition 42 and labyrinth means 100 or 104,145 therefor, and an adjustable lip means 110,144,178 coupled to the 2<sup>nd</sup> partition.

With respect to independent claim 25, Lynch discloses the following: compartment means for coalescing, 1<sup>st</sup> weir means and inlet opening means therefor, 2<sup>nd</sup> weir means and labyrinth means therefor, an adjustable lip means coupled to the labyrinth means.

Lynch also discloses the following for dependent claims: for claim 22, a means for upwardly directing portion of fluid into 1<sup>st</sup> weir means 173 (column 10, lines 12-17), for claim 23, a means for directing portion of entrained organic phase away from 2<sup>nd</sup> weir (secondary coalescing screen media 100, column 6, lines 34-49), and for claim 24, means for varying location of the inlet opening and of the entire apparatus (figure 8

Art Unit: 1723

shows the entire apparatus being mountable on a wheeled platform to be made portable (column 7, lines 1-9).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1723

Claims 2-4,6-8 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch patent 4,333,835 in view of Johnson patent 6,019,898. With respect to independent claim 7, Lynch discloses the following: settler compartment 12 having top section adjacent top wall 14/16/20 and bottom section 52/56/58 adjacent a bottom wall , 1<sup>st</sup> weir 130,131,170 (column 8, lines 23-30 and column 9, lines 65-69) and inlet openings 62 therefor, 2<sup>nd</sup> weir having upwardly extending 1<sup>st</sup> and 2<sup>nd</sup> partitions 60 and 44 and downwardly extending 3<sup>rd</sup> partition 42 and labyrinth means 100 or 104,145 therefor, and an adjustable lip means 110,144,178 coupled to the 2<sup>nd</sup> partition.

Claim 7 and claims dependent therefrom differ from Lynch in requiring the adjustable weir lip coupling to be rotatably coupled to the 2<sup>nd</sup> partition, the weir lip of Lynch merely being vertically adjustable. However, Johnson teaches a rotatably coupled and rotating or pivoting weir lip coupled to a partition comprising the lower section of a separating weir (rotatable lip 27 coupled to partition 15a extending above weir plate 19/23, column 5, lines 46-52 and column 2, lines 29-39). Thence, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Lynch system by substituting the rotatably coupled weir lip edge of Johnson for the slidably adjustable weir lip of Lynch, so as to facilitate accurate adjustment of the height of the weir overflow, to accommodate changes in liquid level in the settler chamber.

Lynch also discloses the following with respect to dependent claims: for claim 2, the 1<sup>st</sup> weir is associated with collection of organic material or oil (column 8, lines 23-30) and 2<sup>nd</sup> weir is associated with collection of clarified water (column 8, lines 61-68); for

Art Unit: 1723

claims 3 and 6, inlet opening and other portions of both 1<sup>st</sup> and 2<sup>nd</sup> weirs being above sludge-type organic phase/water interfaces in filtering or coalescing material 68 below the openings; for claim 4, a portion of 1<sup>st</sup> weir being vertically adjustable (column 9, lines 65-67), also the location of entire settler compartment and all components therein is adjustable since the settler compartment can be moved by positioning it on a trailer or platform that is portable by use of wheels (see figure ); for claim 8, a protruding lip 60 or 132 from front wall of 1<sup>st</sup> weir for purposes of supporting the weir, for claims 18 and 20 riser with top drain/outlet 66,62,64, and for claim 19, sump section 56 or 58 .

For claims 14-16, Lynch teaches 1<sup>st</sup> weir front walls to be attached at about a 90 degree angle to the side wall of the settler compartment.

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch in view of Johnson as applied to claim 7 above, and further in view of Stonner et al patent 3,820,954. Claims 9-12 differ from Lynch in requiring the 1<sup>st</sup> weir to have a bottom wall and such wall to be angled towards the bottom rear side of the settler compartment. Stonner teaches an oil/water settler and separator having such weirs with bottom walls that slope towards the back thereof (column 4, lines 21-32). It would have been further obvious to have added such sloping bottom wall taught by Stonner et al to the 1<sup>st</sup> weir of Lynch, in order to facilitate a greater separation of the liquid phases into distinct layers (see Stonner at column 2, lines 53-59). Regarding claims 10-12 of this group of claims, Lynch also teaches protruding lip 132 extending downwardly from coalescing compartment and 1<sup>st</sup> weir towards the settler bottom to support these

Art Unit: 1723

structures, while Stonner et al teach the inclined plate of weir front wall of claims 11 and 12.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch in view of Johnson as applied to claim 7 above, and further in view of Casner et al patent 2,817,440. Claim 13 differs from Lynch in requiring the sides of the 1<sup>st</sup> weir to be angled or unequally spaced from the back side of the settler compartment. Casner et al teach such angling of weir wall sides (column 3, lines 3-23, especially lines 11-13, with sides and bottom angled towards one side of settler compartment in order to facilitate flow of heavy impurities towards discharge outlets on the side of the settler compartment (Casner at column 4, lines 55-59).



Art Unit: 1723

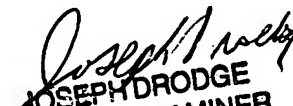
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

February 21, 2006

  
JOSEPH DRODGE  
PRIMARY EXAMINER